January 24 2011

To: CAS Implementation Team

From: CAS Review Committee

The institution of a comprehensive assurance system provides the Fermilab, FRA and the DOE an opportunity to rationalize multiple assurance and oversight processes. A comprehensive assurance system will provide the foundation for an effective partnership among the three entities and allow the laboratory to focus on its core mission more effectively while providing necessary assurances of mission fulfillment in a systematic and transparent manner.

The review committee commends the Fermilab management team for the steps that it has already taken to implement the Contract Assurance System (CAS) in accordance with Clause H.13. The draft CAS document provides a comprehensive description of management systems currently in place at the lab and the processes embedded in those systems. Those systems provide the foundation for CAS.

There is an excellent working relationship between the Lab and the site office. We perceive a sense of trust and effective partnership between the two groups. We believe with this relationship and the advent of new leadership at FSO the Fermilab has a unique opportunity to design a CAS that becomes a standard for other national laboratories.

Given that the underlying philosophy of CAS is one of mutual trust and accountability among the partners—laboratory management, the contractor and DOE—the development of CAS should be undertaken as a joint mission. Lab management should ensure participation and input into the process from FRA and FSO from the very beginning.

Specifically we suggest that an immediate next step should be for senior representatives of FSO, FRA and lab management to get together for an off-site retreat to jointly define the guiding principles for Fermi CAS. These principles should include the responsibilities of parties to one another, the means by which the fulfillment of those responsibilities will be assured and how the partners will work together. Equally important is an understanding of how the partners will manage and share the risks facing the enterprise. The output from this initial step should be a brief summary of the shared principles that will form the basis for designing the Fermi CAS and the continued development of the lab.

Once the guiding principles are determined the actual development of CAS can be undertaken. We offer the following comments as suggestions to guide the development of CAS at Fermilab:

• Fermi lab management should benchmark with other labs that have good assurance systems and partnerships currently in place. A specific suggestion is to visit the Kansas

City Plant to learn from their experiences. We note, however, that the assurance system at Fermi lab will be unique in response to its own mission and context. The purpose of this benchmarking exercise is to examine how lab managements and site offices have built strong relationships, trust and accountability to each other at those sites.

- The development of CAS is an opportunity to not only document existing procedures but also to review and rationalize them as appropriate and identify gaps in the existing processes. At the same time procedures that are duplicative or ineffective should be eliminated or improved.
- The goal should be to develop a system that is comprehensive and inclusive of important existing assessment systems (such as PEMP) yet includes only the necessary audits and assessments that are required. Particular attention must be paid to assessment of mission performance and enterprise risk.
- The CAS should provide confidence that missions goals are being met, systems are
  effective and that there is a comprehensive process to verify effectiveness. CAS should
  also be viewed as a tool for continuous improvement and thus include not only processes
  for assessment but also processes for taking corrective actions when assessment results
  warrant action.
- The CAS documentation should describe the peer reviews, assessments, audits and other steps undertaken by lab management so that the other partners do not have to duplicate those activities. Ideally development of CAS should lead to a reduction in the current oversight activities of the FSO and DOE and even to a simplification of the contract to remove mandated reporting and assurance steps that may be made redundant by CAS.
- In developing CAS the risk benefit trade-offs of performance standards and assessments should be evaluated carefully to eliminate procedures that provide little marginal benefit relative to the effort required.

With regard to the final CAS document we offer the following suggestions:

- The final document should provide a clear but succinct documentation of CAS in approximately ten pages. It should document the desired state and not just describe the current systems.
- The documentation of assurance systems provides an opportunity to transfer expertise to future employees by making explicit goals, processes and procedures that may currently be mostly implicit.
- The document should start with a pictorial depiction of the important management systems that will constitute the CAS and the interrelationships among those systems. The process map should illustrate how all of the policies and procedures flow together. The

rest of the document would provide a summary of the objectives of each system and how they are to be implemented.

• The document should describe how performance measures are established and how they are benchmarked. It should provide information on what benchmarks are used, how those benchmarks are established and how they are used.

The Review Committee looks forward to working with the CAS implementation team. We suggest that an implementation time table should be developed immediately and the documentation be completed prior to the next meeting with the review committee in June. In developing CAS the initial focus should be on the most important mission critical systems and later cascade to the other management systems.

Individually or collectively we will be happy to provide feedback on interim drafts or other aspects of the project. Please do not hesitate to contact us as necessary.

Thank you.

Anne Street on behalf of the entire CAS Review Committee